

REMARKS

Claims 1, 3-9, 11-17, 19-26, 28-34, 37-45 and 47-52 are pending in this application, of which Claims 1, 9, 17, 25, 34 and 43 are independent. Claims 1, 9, 17, 25, 34 and 43 have been amended to define still more clearly what Applicant regards as his invention.

In the Office Action, Claims 1, 3-9, 11, 17, 19-26, 28-34, 37-45 and 47-52 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 5,555,362 (Yamashita et al.) in view of U.S. Patent 5,745,664 (Nomura et al.).

The purpose of the various aspects of the present invention recited in Independent Claims 1, 9 and 17 is, as described at page 3, lines 19-24, to generate a reduced image the contents of which can be easily identified even as a display like a list of documents or a list of search results.

Independent Claim 1 is directed to a reduced image forming apparatus that comprises recording means for recording a plurality of images. Dividing means are provided for dividing each of those images into a plurality of image blocks, and extracting means extract a plurality of partial images from each of the plurality of image blocks (that is, each block is the source of at least one partial image). Also provided are generating means for combining the plurality of partial images extracted in this fashion and generating a plurality of combined images, which correspond to respective ones of the plurality of images, smaller than the original image. Indicating means are provided, also, for indicating the combined images generated in this way.

Among other important feature of an apparatus constructed according to Claim 1, is dividing each of a plurality of images into image blocks, extracting partial images from each of the image blocks, combining the extracted partial images, generating a plurality of combined images that correspond to respective ones of the plurality of images, but smaller than the latter images and indicating the plurality of combined images.

Yamashita, as has been thoroughly discussed in previous papers, relates to analyzing the layout of a document image, segmenting it into parts and recomposing it in order to generate a flexible layout model. That patent does not concern combining only images extracted from each of plural image blocks obtained by dividing plural starting images, and indicating resulting reduced images which correspond to respective ones of that plurality of images. What the *Yamashita* system achieves is a change in the layout of an image.

Nomura relates to reading a partial image, editing the read partial image, indicating its reduced image and combining the image with a predetermined document. The purpose, again, is to achieve proper placement of the smaller image in the course of synthesis of that image with the other document.

Applicant submits, however, that nothing has been found or pointed out in *Nomura* about combining only images extracted from each of plural image blocks that have been obtained by dividing a plurality of starting images, and indicating the resulting reduced images that correspond to respective ones of the starting images. Moreover, even if the *Nomura* technique relied upon by the Office Action were combined with *Yamashita* (and even assuming the proposed combination would be permissible), the result would not

in fact meet the terms of Claim 1. Rather, the result would merely be an apparatus that can be used to control the layout of a document image, in which as in *Yamashita* the image can be taken apart and recomposed, and in which there is the additional capability of synthesizing a further image with the given document, as in *Nomura*. Applicant does not see how one of merely ordinary skill would find anything in either document, or in his or her general knowledge, that would suggest (1) dividing plural images into blocks (this does not appear to be suggested by the art at all), much less (2) extracting a partial image from each such block (and therefore plural partial images from each of the starting images), still less (3) combining the partial images into a plurality of combined images each (a) correspond to a respective one of the starting images and (b) are each smaller than the respective starting image, as recited in Claim 1.

Consequently, even if the cited references are combined, the result would not provide the structure of Claim 1 or the effect of the present invention, i.e., generating reduced images, which contents can be easily identified even as a display like a list of documents or a list of search results, is not achieved.

Independent Claim 25 is directed to a reduced image forming apparatus that comprises recording means for recording a plurality of images, and converting means for converting the plurality of images into a plurality of character trains. Also provided are dividing means for dividing each of the plurality of character trains into a plurality of character train blocks, extracting means for extracting a partial character train from each of the character train blocks, and generating means for combining a plurality of partial character trains extracted in this fashion, converting the combined partial character trains

into an image, and generating a plurality of combined images, which correspond to respective ones of the plurality of images, smaller than the original image. Indicating means are provided, for indicating the plurality of combined images generated in this way.

Claim 25 is believed to be clearly allowable over *Yamashita* and *Nomura* for the same reasons as is Claim 1.

The other independent claims are each, respectively, either a method or a storage-medium claim corresponding to one or the other of the two apparatus claims discussed above, and are therefore deemed also to be allowable for the same reasons as are discussed above.

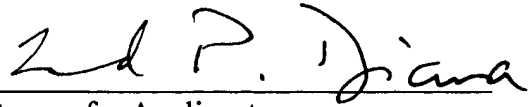
A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


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